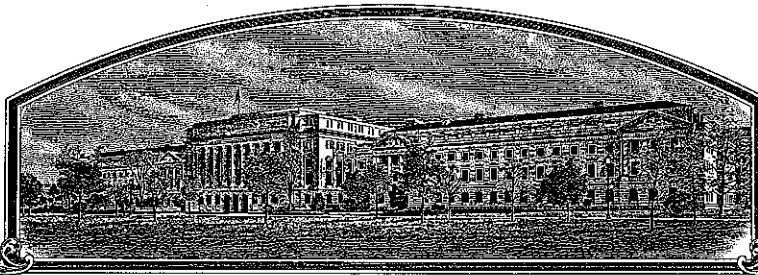


No.

200500349



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Louisiana State University Agricultural Center

Whereas, THERE HAS BEEN PRESENTED TO THE

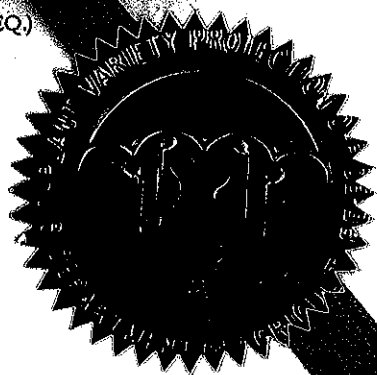
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

RICE

'CL131'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fifth day of June, in the year two thousand and six.

Attest:

*[Signature]*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

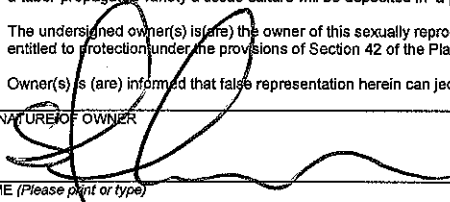
*[Signature]*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER  Louisiana State University Agricultural Center		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME  CL020	3. VARIETY NAME  CL131
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)  Rice Research Station 1373 Caffey Road Rayne, LA 70578		5. TELEPHONE (include area code)  (337) 788-7531	<b>FOR OFFICIAL USE ONLY</b> VPPO NUMBER <b>200500349</b> FILING DATE <b>September 21, 05</b>
		6. FAX (include area code)  (337) 788-7553	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)  Public University	8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers)  Steve Linscombe Rice Research Station 1373 Caffey Road Rayne, LA 70578			F E E S R E C E I V E D FILING AND EXAMINATION FEES: \$ 3652 DATE Sept 21, 2005 CERTIFICATION FEE: \$ 768 DATE 4/26/2006
11. TELEPHONE (include area code)  (337) 788-7531	12. FAX (include area code)  (337) 788-7553	13. E-MAIL  slinscombe@agcenter.lsu.edu	
14. CROP KIND (Common Name)  Rice	16. FAMILY NAME (Botanical)  Poaceae	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL)  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP  Oryza sativa	17. IS THE VARIETY A FIRST GENERATION HYBRID?  <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input checked="" type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input type="checkbox"/> NO (If "no", go to item 23) 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED 22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?  <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO  IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?  <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO  IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.  The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.  Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER 		SIGNATURE OF OWNER	
NAME (Please print or type)  Steve Linscombe		NAME (Please print or type)	
CAPACITY OR TITLE  Professor	DATE  8/25/05	CAPACITY OR TITLE	DATE

(See reverse for instructions and information collection burden statement)

# INSTRUCTIONS

**GENERAL:** To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

200500349

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

## ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
- (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
- (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (*See Regulations and Rules of Practice, Section 97.103*).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

## 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

The following generations may be certified: Breeder-Foundation-Registered-Certified

## 23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Sale - Foundation and Registered - March 1, 2005, USA -- transferred to Uruguay July 2005

## 24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

US Patent 6,943,280 Resistance to acetohydroxycid synthase-inhibiting herbicides/ Utility patent serial number 60/715,690 Filed September 9, 2005

**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (*See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.*)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

**EXHIBIT A****Origin and Breeding History**

<b>CL131 – Development History</b> <b>Pedigree: CL161//Kaybonnet/LA2031</b>		
<b>Year</b>	<b>Generation</b>	<b>ID</b>
2000	Cross F <sub>0</sub>	00CR387
2001	F <sub>1</sub>	01T034
2001	F <sub>2</sub>	01B268-300 (Puerto Rico)
2002	F <sub>3</sub>	02P2056 (Puerto Rico)
2002	F <sub>4</sub>	0283305
2002	F <sub>5</sub>	02PR1351 (Puerto Rico)
2003	F <sub>6</sub>	CL002 (Clearfield Yield Test)
2004	F <sub>7</sub>	Puerto Rico Headrow Increase
2004	F <sub>8</sub>	Foundation Seed Production

Details of stages of selection and multiplication: CL131 was developed from a modified program of single seed descent. From the original cross made in 2000, four plants were grown in 2001. The seed from these plants were bulked and used to grow a large F<sub>2</sub> population at the Puerto Rico winter nursery (planted in August 2001). One panicle was selected from each of 150 F<sub>2</sub> plants and these were grown as F<sub>3</sub> panicle rows in Puerto Rico (planted in December 2001). Row number 02P2056 was selected for advancement. Ten panicles were selected from this row and used to plant five F<sub>4</sub> panicle rows on the Rice Research Station in May 2002. Five panicles were selected from row 0283305 and used to plant five F<sub>5</sub> panicle rows in Puerto Rico in October 2002. Row 02PR1351 was selected for advancement and five panicles were selected from this row then the remaining seed was bulked. The bulked seed was used for testing and the five panicles were seeded for increase and purification purposes of the Rice Research Station in the summer of 2003. Seed was harvested from the five panicle rows and used to plant a seed increase in Puerto Rico in January 2004. This seed was reselected, harvested, and returned to the Rice Research Station. It was used to plant a Breeder/Foundation field on the Station in early June 2004. This seed was the origin of CL131 that has been provided to the industry.

CL131 has been observed for four generations of increase and multiplication and has exhibited a high level of uniformity and stability.

CL131 was originally selected in the F<sub>5</sub> generation as a semidwarf, very early imazethapyr-resistant line that displayed good yield potential and quality characteristics.

In each generation of multiplication and purification (F<sub>5</sub> – F<sub>8</sub>), the line was selected for uniformity and purity.

Variants observed and removed from increase fields of CL131 included any combination of the following: taller, earlier, later, medium grain, and intermediate grain. The total number of variants numbered less than 1 per 5,000 plants.

**Exhibit B****Statement of Distinctness**

CL131 is a very early maturing, imazethapyr-resistant long-grain rice variety. The line possesses the CFX18 gene for resistance to imazethapyr, which is the same gene found in CL161. CL131 was developed from the cross CL161//Kaybonnet/LA2031 made at the Rice Research Station in 2000 (00CR387). In testing, the line has averaged 91 cm in plant height compared with 104 for CL161.

CL131 most closely resembles the rice variety CL161. CL131 has an erect flag leaf angle at maturity while CL161 displays intermediate erectness at this growth stage. CL161 also averages 13 cm taller (at maturity) than CL131.

CL131 differs from all conventional rice varieties by the fact that it is resistant to imazethapyr and conventional varieties are not. It differs from CL121, CL141, and CFX51 in that it contains the CFX18 gene for imazethapyr resistance, which impacts a much higher level of resistance to imazethapyr than that found in the earlier Clearfield varieties.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY  
Rice (*Oryza sativa*)

NAME OF APPLICANT (S) <b>Louisiana State University Agricultural Center</b>	TEMPORARY OR EXPERIMENTAL DESIGNATION <b>CL020</b>	VARIETY NAME <b>CL131</b>
ADDRESS (Street and No. or RD No., City, State, and Zip Code, Country) <b>Rice Research Station 1373 Caffey Road Rayne, LA 70578</b>		FOR OFFICIAL USE ONLY PVPO NUMBER <b>2005 00349</b>

## PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the character of this variety in the spaces provided below. These numbers are also code numbers corresponding to descriptors developed by IBGR-IRRI Rice Advisory Committee and the US Rice Crop Advisory Committee. Breeders will demonstrate distinctness more readily by describing as many characters as is possible.

## 1. MATURITY: Days to Heading (Seedling to 50% Heading)

A. South: (Location: Louisiana) at 165 kg/ha (Nitrogen Rate)

84.8 Number of Days

2 Days Earlier Than Check Variety: CL1616

     Days Same As Check Variety:                     

     Days Later Than Check Variety:                     

1 Maturity Class 1 = Very Early (85 Days or Less) 2 = Early (86 - 100)  
3 = Intermediate (101 - 115) 4 = Late (More Than 115)

B. California: (Location:                     ) at                      kg/ha (Nitrogen Rate)

     Number of Days

     Days Earlier Than Check Variety:                     

     Days Same As Check Variety:                     

     Days Later Than Check Variety:                     

     Maturity Class 1 = Very Early (90 Days or Less) 2 = Early (91 - 97)  
3 = Intermediate (98 - 104) 4 = Late (More Than 104)

## 2. CULM:

1 Angle (Degrees from Perpendicular after Flowering):  
1 = Erect (Less than 30°) 3 = Intermediate (About 45°) 5 = Open (About 60°)  
7 = Spreading (More than 60° but the culms do not rest on the ground)  
9 = Procumbent (The culm or its lower part rests on the ground surface)

**2. CULM:** (continued)

## LENGTH

90 • 0 cm (Soil level to top of extended panicle on main stem)13 • 0 cm Shorter Than Check Variety: CL161

Length Same as

Check Variety: \_\_\_\_\_

• cm Longer Than Check Variety: \_\_\_\_\_1 Height Class: 1 = Semi dwarf 2 = Short 3 = Medium 4 = Tall2 Internode Color (After Flowering): 1 = Green 2 = Light Gold 3 = Purple Lines 4 = Purple1 Strength (Lodging Resistance): 1 = Strong (no Lodging) 3 = Moderately Strong (Most Plants Leaning)  
5 = Intermediate (Most Plants Lodged) 7 = Weak (Most Plants Flat)  
9 = Very Weak (All Plants Flat)**3. FLAG LEAF** (After Heading):29 • 0 cm Length10 • 0 mm Width1 Pubescence: 1 = Glabrous 2 = Intermediate 3 = Pubescent1 Leaf Angle (After Heading): 1 = Erect 3 = Intermediate 5 = Horizontal 7 = Descending2 Blade Color: 1 = Pale Green 2 = Green 3 = Dark Green 4 = Purple Tips  
5 = Purple Margins 6 = Purple Blotch 7 = Purple1 Basal Leaf Sheath Color: 1 = Green 2 = Purple Lines 3 = Light Purple 4 = Purple**4. LIGULE:**7 • 2 mm Length (From base of collar to the tip, at late vegetative stage)1 Color (Late Vegetative Stage): 1 = White 2 = Purple Lines 3 = Purple1 Shape: 1 = Acute to Acuminate 2 = 2-Cleft 3 = Truncate1 Collar Color (Late Vegetative Stage): 1 = Pale Green 2 = Green 3 = Purple1 Auricle Color (Late Vegetative Stage): 1 = Pale Green 2 = Purple**5. PANICLE:**19 • 0 cm Length5 Type: 1 = Compact 5 = Intermediate 9 = Open2 Secondary Branching: 1 = Absent 2 = Light 3 = Heavy 4 = Clustering2 Exsertion (Near Maturity): 1 = Less than 90% 2 = 90 – 99% 3 = 100% Exserted1 Axis: 1 = Straight 2 = Droopy3 Shattering: 1 = Very Low (Less Than 1%) 3 = Low (1 – 5%) 5 = Moderate (6 – 25%)  
7 = Moderately High (26 – 50%) 9 = High (More than 50%)3 Threshability: 1 = Difficult 2 = Intermediate 3 = Easy**6. GRAIN** (Spikelet):1 Awns (After Full Heading): 0 = Absent 1 = Short and Partly Awned 5 = Short and Fully Awned  
7 = Long and Partly Awned 9 = Long and Fully Awned6 Apiculus Color (At Maturity): 1 = White 2 = Straw 3 = Brown (Tawny) 4 = Red  
5 = Red Apex 6 = Purple 7 = Purple Apex1 Stigma Color: 1 = White 2 = Light Green 3 = Yellow 4 = Light Purple 5 = Purple

6

200500349

**6. GRAIN (Spikelet):**0 Lemma and Palea Color (At Maturity):

0 = Straw	1 = Gold and/or Gold Furrows on Straw Background	2 = Brown Spots on Straw (Piebald)
3 = Brown Furrows on Straw	4 = Brown (Tawny)	5 = Reddish to Light Purple
6 = Purple Spots on Straw	7 = Purple Furrows on Straw	8 = Purple
9 = Black	10 = White	

1 Lemma and Palea Pubescence:

1 = Glabrous	2 = Hairs on Lemma Keel	3 = Hairs on Upper Portion
4 = Short Hairs	5 = Long Hairs (Velvety)	

1 Spikelet Sterility (At Maturity):

1 = Highly Fertile (> 90%)	3 = Fertile (75 – 90%)	5 = Partly Sterile (50 – 74%)
7 = Highly Sterile (< 50% to Trace)	9 = Completely Sterile (0%)	

**7. GRAIN (Seed):**2 Seed Coat (Bran) Color:

1 = White	2 = Light Brown	3 = Speckled Brown	4 = Brown
5 = Red	6 = Variable Purple	7 = Purple	

1 Endosperm Type:

1 = Nonglutinous (Nonwaxy)	2 = Glutinous (Waxy)	3 = Indeterminate
----------------------------	----------------------	-------------------

1 Endosperm Translucency:

1 = Clear	5 = Intermediate	9 = Opaque
-----------	------------------	------------

1 Endosperm Chalkiness:

0 = None	1 = Small (Less than 10% of Sample)
5 = Medium (10 – 20% of Sample)	9 = Large (More than 20% of Sample)

0 Scent (Aroma):

0 = Nonscented	1 = Lightly Scented	2 = Scented
----------------	---------------------	-------------

## Shape Class (Length/Width Ratio):

3 Paddy

1 = Short (2.2:1 and Less)	2 = Medium (2.3:1 to 3.3:1)	3 = Long (3.4:1 and More)
----------------------------	-----------------------------	---------------------------

3 Brown

1 = Short (2.0:1 and Less)	2 = Medium (2.1:1 to 3.0:1)	3 = Long (3.1:1 and More)
----------------------------	-----------------------------	---------------------------

3 Milled

1 = Short (1.9:1 and Less)	2 = Medium (2.0:1 to 2.9:1)	3 = Long (3.0:1 and More)
----------------------------	-----------------------------	---------------------------

## Measurements:

Grain Form	Length (mm)	Width (mm)	Thickness (mm)	L/W Ratio	1000 Grains (grams)
Paddy	9.06	2.53	2.03	3.58	19.8
Brown	7.14	2.22	1.72	3.22	17.1
Milled	6.62	2.18	1.67	3.04	16.8

20 Milling Quality (% Hulls)67 Milling Yield (% White Kernel (head) Rice to Rough Rice)7.18 % Protein24.1 % Amylose

## Alkali Spreading Value:

\_\_\_\_\_ 1.5% KOH Solution

3.9 1.7% KOH Solution5 Gelatination Temperature Type:

1 = High	5 = Intermediate	7 = Low
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## Amylographic Paste Viscosity (Brabender Units)

Peak	Hot Paste	Cooled Paste	'Breakdown' 'Setback'
<u>274.7</u>	<u>163.3</u>	<u>304.8</u>	<u>111.3</u>

**8. RESISTANCE TO LOW TEMPERATURE:**2 Germination and Seedling Vigor:

1 = Low	2 = Medium	3 = High
---------	------------	----------

2 Flowering (Spikelet Fertility):

1 = Low	2 = Medium	3 = High
---------	------------	----------

**9. SEEDLING VIGOR NOT RELATED TO LOW TEMPERATURE:**2 Vigor:

1 = Low	2 = Medium	3 = High
---------	------------	----------

7



**10. BLAST RESISTANCE: (*Pyricularia oryzae*). (International races found under References)**

0 = Immune      1 = Resistant      3 = Moderately Resistant      5 = Intermediate      7 = Moderately Susceptible      9 = Susceptible

Group	IB					IC		ID	IE		IG	IH
Number	1	5	45	49	54	1	17	1	13	1	1	1
Resistance	--	--	--	7	--	--	7	--	--	--	--	--

**11. RESISTANCE TO OTHER DISEASES:**

0 = Immune      1 = Resistant      3 = Moderately Resistant      5 = Intermediate      7 = Moderately Susceptible      9 = Susceptible

- |  |  |
|--|--|
| <u>7</u> Narrow Brown Leaf Spot ( <i>Cerospora oryzae</i> )  | <u>--</u> Aggregate Sheath Spot ( <i>Rhizoctonia Oryzae-sativae</i> )                |
| <u>7</u> Leaf Smut ( <i>Entyloma oryzae</i> )  | <u>7</u> Straight Head   |
| <u>7</u> Brown Leaf Spot ( <i>Helminthosporium oryzae</i> )<br>(= <i>Bipolaris oryzae</i> )<br>(= <i>Drechslera oryzae</i> ) | <u>7</u> Kernel Smut ( <i>Neovossia horrida</i> )<br>(= <i>Tilletia barclayana</i> ) |
| <u>--</u> Leaf Scald ( <i>Gerlachia oryzae</i> )   | <u>--</u> White Tip Nematode ( <i>Aphelenchoides besseyi</i> )                       |
| <u>--</u> Hoja Blanca Virus  | <u>--</u> Stem Rot ( <i>Sclerotium oryzae</i> )                                      |
| <u>--</u> Sheath Rot ( <i>Sarocladium oryzae</i> )   | <u>--</u> Bacterial Blight ( <i>Xanthomonas campestris pv. oryzae</i> )              |
| <u>--</u> Pythium Seedling Blight ( <i>Pythium sp.</i> )   | <u>7</u> Sheath Blight ( <i>Rhizoctonia solani</i> )                                 |
| <u>7</u> Sheath Spot ( <i>Rhizoctonia oryzae</i> )   |  |
| <u>--</u> Other: _____   |  |

**12. INSECT RESISTANCE:**

0 = Immune      1 = Resistant      3 = Moderately Resistant      5 = Intermediate      7 = Moderately Susceptible      9 = Susceptible

- |                           |   |
|---------------------------|---|
| <u>--</u> Grasshopper     | <u>9</u> Rice Stink Bug ( <i>Oegalus pugnax</i> )               |
| <u>--</u> Rice Leafhopper | <u>--</u> Swarm Caterpillar                                     |
| <u>--</u> Rice Hispa      | <u>9</u> Rice Water Weevil ( <i>Lissorhoptrus oryzophilus</i> ) |
| <u>--</u> Rice Midge      | <u>--</u> Rice Stalk Borer ( <i>Chilo plejadellus</i> )         |
| <u>--</u> Least Skipper   | <u>--</u> Sugarcane Borer ( <i>Diatraea saccharalis</i> )       |

**13. OTHER DESCRIPTORS:** If there are other characters that describe this variety, please indicate below:**REFERENCES**

- C. R. Adair *et al.* 1972. Rice in the United States: Varieties and Production. USDA Handbook No. 289 (Rev.), 124 pp.
- J. G. Atkins *et al.* 1967. An International Set of Rice Varieties for Differentiating Race of *Pyricularia Oryzae*. Phytopath. 57:297-301.
- IBPGR-IRRI Rice Advisory Committee. 1980. Descriptors for Rice *Oryza sativa* L. International Rice Research Institute. 21 pp.
- K. C. Ling and S. H. Ou, 1969. Standardization of the International Race Numbers of *Pyricularia Oryzae*. Phytopath. 59:339-342.
- B. D. Webb *et al.* 1985. Utilization Characteristics and Qualities of United States Rice. In Proceedings on Rice Grain Quality and Marketing. International Rice Research Institute (IRRI), Los Branos, Philippines. P. 25-35.

Table 1. Average main crop yields (lb/A) for CL131 and CL161 across several trials at multiple locations in Louisiana (2003-2004).

YEAR	TEST	CL131	CL161
2003	CLRP - RRS	8830	8621
	CL - LAKE ARTHUR	5952	5461
	<b>2003 Average</b>	<b>7391</b>	<b>7041</b>
2004	CL - RRS	6524	6511
	CL - ACADIA	6520	5993
	CL - EVANGELINE	7172	7436
	CL - JEFF DAVIS	4963	4974
	CL - LAKE ARTHUR	6082	5875
	CL - PINE ISLAND	4603	4777
	CLPY - RRS	6804	7693
	CA - RRS	7206	7290
	CA - ACADIA	6712	6286
	CA - EVANGELINE	7092	7149
	CA - LAKE ARTHUR	5998	5762
	CA - MOREHOUSE	8195	7847
	CA - PINE ISLAND	5158	5152
	<b>2004 Average</b>	<b>6387</b>	<b>6365</b>
<b>Grand Mean</b>		<b>6520</b>	<b>6455</b>

Table 2. Whole rice yield (%) for CL131 and CL161 across several trials at multiple locations in Louisiana (2003-2004).

YEAR	TEST	CL131	CL161
2003	CLRP - RRS	69.7	68.9
	CL - LAKE ARTHUR	66.9	63.5
	<b>2003 Average</b>	<b>68.3</b>	<b>66.2</b>
2004	CL - RRS	64.4	61.7
	CL - ACADIA	66.9	67.4
	CL - LAKE ARTHUR	69.5	66.7
	CLPY - RRS	66.4	69.1
	CA - RRS	64.6	62.9
	CA - ACADIA	67.2	67.4
	CA - LAKE ARTHUR	68.8	67.9
	<b>2004 Average</b>	<b>66.8</b>	<b>66.2</b>
<b>Grand Mean</b>		<b>67.2</b>	<b>66.2</b>

Table 3. Total rice yield (%) for CL131 and CL161 across several trials at multiple locations in Louisiana (2003-2004).

YEAR	TEST	CL131	CL161
2003	CLRP - RRS	73.1	72.4
	CL - LAKE ARTHUR	73.6	70.5
	<b>2003 Average</b>	<b>73.4</b>	<b>71.5</b>
2004	CL - RRS	69.8	67.7
	CL - ACADIA	72.3	71.1
	CL - LAKE ARTHUR	73.1	71.0
	CLPY - RRS	71.4	72.2
	CA - RRS	69.9	69.0
	CA - ACADIA	72.2	71.1
	CA - LAKE ARTHUR	73.6	72.5
	<b>2004 Average</b>	<b>71.8</b>	<b>70.7</b>
<b>Grand Mean</b>		<b>72.1</b>	<b>70.8</b>

Table 4. Mean plant height (cm) for CL131 and CL161 across several trials at multiple locations in Louisiana (2003-2004).

YEAR	TEST	CL131	CL161
2003	CLRP - RRS	101	108
	CL - LAKE ARTHUR	95	108
	<b>2003 Average</b>	<b>98</b>	<b>108</b>

2004	CL - RRS	93	115
	CL - ACADIA	90	103
	CL - EVANGELINE	93	103
	CL - JEFF DAVIS	85	98
	CL - LAKE ARTHUR	88	98
	CL - PINE ISLAND	88	98
	CLPY - RRS	90	103
	CA - RRS	90	108
	CA - ACADIA	88	103
	CA - EVANGELINE	90	98
	CA - LAKE ARTHUR	88	103
	CA - PINE ISLAND	85	95
	<b>2004 Average</b>	<b>89</b>	<b>102</b>

<b>Grand Mean</b>	<b>90</b>	<b>103</b>
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Table 5. Mean number of days to 50% heading for CL131 and CL161 across several trials at multiple locations in Louisiana (2003-2004).

YEAR	TEST	CL131	CL161
2003	CLRP - RRS	77	77
	CL - LAKE ARTHUR	80	79
	<b>2003 Average</b>	<b>79</b>	<b>78</b>

2004	CL - RRS	89	95
	CL - ACADIA	88	93
	CL - EVANGELINE	88	89
	CL - JEFF DAVIS	89	92
	CL - LAKE ARTHUR	88	90
	CL - PINE ISLAND	83	84
	CLPY - RRS	80	83
	CA - RRS	88	94
	CA - ACADIA	87	93
	CA - EVANGELINE	87	87
	CA - LAKE ARTHUR	84	88
	CA - MOREHOUSE	83	85
	CA - PINE ISLAND	81	82
	<b>2004 Average</b>	<b>86</b>	<b>89</b>

<b>Grand Mean</b>	<b>85</b>	<b>87</b>
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Table 6. Seedling vigor for CL131 and CL161 across several trials at multiple locations in Louisiana (2003-2004).

YEAR	TEST	CL131	CL161
2003	CLRP - RRS	6	4
	CL - LAKE ARTHUR	8	4
	<b>2003 Average</b>	<b>7</b>	<b>4</b>
2004	CL - JEFF DAVIS	4	4
	CL - LAKE ARTHUR	5	5
	CL - PINE ISLAND	5	4
	CA - LAKE ARTHUR	4	4
	CA - PINE ISLAND	3	3
	<b>2004 Average</b>	<b>5</b>	<b>4</b>
<b>Grand Mean</b>		<b>86</b>	<b>87</b>

Table 7. Reaction of CL131 and CL161 to Sheath Blight (*Rhizoctonia solani*) in field plots (2004).

YEAR	TEST	CL131	CL161
2004	CA - RRS	7.5	7.3

\* Using a scale of 0 = very resistant to 9 = very susceptible.

Table 8. Reaction of CL131 and CL161 to Leaf Blast (*Pyricularia grisea*) in field plots (2004).

YEAR	TEST	CL131	CL161
2004	CA - RRS	1.8	4.5

\* Using a scale of 0 = very resistant to 9 = very susceptible.

Table 9. Reaction of CL131 and CL161 to the physiological disorder straighthead (2004).

YEAR	TEST	CL131	CL161
2004	RRS	5.7	3.0

Table 10 Rough, brown and milled grain dimensions and weight of CL131 and CL161 grown in Crowley, LA (2004).

Variety	Type	Length mm	Width mm	Thickness mm	L/W Ratio
CL131	Rough	9.06	2.53	2.03	3.58
	Brown	7.14	2.22	1.72	3.22
	Milled	6.62	2.18	1.67	3.04
CL161	Rough	9.10	2.52	2.00	3.61
	Brown	6.96	2.17	1.69	3.21
	Milled	6.65	2.07	1.64	3.21



Table 11. Reaction of CL131 and CL161 to Narrow Brown Leaf Spot\* (*Cercospora janseana*) in field plots (2004).

YEAR	TEST	CL131	CL161
2004	CA - RRS	5.0	3.5

\* Using a scale of 0 = very resistant to 9 = very susceptible.

Table 12. Reaction of CL131 and CL161 to Leaf Smut\* (*Entyloma oryzae*) in field plots (2004).

YEAR	TEST	CL131	CL161
2004	CA - RRS	5.8	3.8

\* Using a scale of 0 = very resistant to 9 = very susceptible.

Table 13. Reaction of CL131 and CL161 to Brown Spot\* (*Cochiobolus miyabeanus*) in field plots (2004).

YEAR	TEST	CL131	CL161
2004	CA - RRS	1.5	1.8

\* Using a scale of 0 = very resistant to 9 = very susceptible.

Trait	Performance		Number of Tests	Reference
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	CL131	CL161		
Yield	6520	6455	15	Table 1
Ratoon				

Whole	67.2	66.2	9	Table 2
Total	72.1	70.8	9	Table 3

Length-Rough	9.06	9.10		Table 10
Width-Rough	2.53	2.52		Table 10
L/W Ratio-Rough	3.58	3.61		Table 10

Length-Brown	7.14	6.69		Table 10
Width-Brown	2.22	2.17		Table 10
L/W Ratio-Brown	3.22	3.21		Table 10

Length-Milled	6.62	6.65		Table 10
Width-Milled	2.18	2.07		Table 10
L/W Ratio-Milled	3.04	3.21		Table 10

Vigor	5	4	7	Table 6
Height (cm)	90	103	14	Table 4
Days to 50%	85	87	15	Table 5

Blast (LB/RNB)	1.8	4.5		Table 8
Sheath Blight	7.5	7.3		Table 7
Straighthead	5.7	3.0		Table 9

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE**EXHIBIT E**  
**STATEMENT OF THE BASIS OF OWNERSHIP**

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)  Louisiana State University Agricultural Center	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  CL020	3. VARIETY NAME  CL131
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)  Rice Research Station 1373 Caffey Road Rayne, LA 70578	5. TELEPHONE (Include area code)  (337) 788-7531	6. FAX (Include area code)  (337) 788-7553
7. PVPO NUMBER <b>200500349</b>		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

**PLEASE NOTE:**

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S.-based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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